Web Technologies

Curriculum Content Frameworks

Please note: All assessment questions will be taken from the knowledge portion of these frameworks.

Prepared by
Kathleen Johnson, Springdale High School

Facilitated by
Karen Chisholm, Program Manager
Office of Assessment and Curriculum
Arkansas Department of Career Education

Edited by
James Brock, Program Manager
Tim Johnston, Program Advisor
Ginger Fisher, Program Advisor
LaTrenda Jackson, Program Advisor
Peggy Wakefield, Program Advisor
Office of Business and Marketing Technology
Arkansas Department of Career Education

Disseminated by
Career and Technical Education
Office of Assessment and Curriculum
Arkansas Department of Workforce Education

Edited: 10/2013

Development/Revision Began: 00/0000

Curriculum Content Frameworks

Web Technologies

Grade Levels: 10, 11, 12 Prerequisite: CA III or CBA Course Code: 492670

Course Description: This course is an exploration of all of the elements of good web page design. Students will begin by creating web pages using HTML, XHTML and CSS. Students will investigate several Adobe software packages to enhance web sites such as: PhotoShop to create and edit graphics; Flash to create animations and web banners. Fireworks to create and optimize images for the web; and Premiere or other video/audio software to create and edit videos and audio. Students will focus on how to use web design software such as Dreamweaver to create websites. Students will also use multimedia equipment such as digital cameras and camcorders to add this rich media to websites. Students will complete several real-world applications such as Flash videos and web pages for the school or other organizations or businesses. Web Communication using Adobe Dreamweaver® (Associate) certification is encouraged.

Table of Contents

	Page
Unit 1: Intro to Web Pages and the WWW	1
Unit 2: Create Web pages using HTML, XHTML, and CSS	2
Unit 3: Exploring Graphics in PhotoShop	4
Unit 4: Creating Animations in Flash	6
Unit 5: Understanding Sound	8
Unit 6: Editing Video	9
Unit 7: Planning and Designing a Successful Web Site	10
Unit 8: Adding Content to a Website using Dreamweaver	12
Unit 9: Organizing Content using Dreamweaver	14
Unit 10: Evaluating and Maintaining a Site by Using Dreamweaver	15
Glossary	17

Unit 1: Intro to Web Pages and the WWW Hours: 5

<u>Terminology:</u> deprecated, domain name, FTP, HTML, HTTP, hyperlink, hypertext, Internet, IP address, ISP, network, protocol, server, URL, Web browser, Web client, Web page, Web server, Web site, WWW, XHTML

	CAREER	and TEC	CHNICAL SKILLS		ACADEMIC and WORKPLACE SKILLS What the Instruction Should Reinforce			
	What the S	tudent Sl	nould be Able to Do					
	Knowledge		Application	Skill Group	Skill	Description		
1.1	Define terminology	1.1.1	Prepare a list of terms with definitions	Foundation	Listening	Comprehends ideas and concepts related to plans [1.2.1]		
					Writing	Uses words appropriately [1.6.21]		
1.2	Identify common web page elements	1.2.1	Examine existing web sites for any of the following: URL hyperlinks title navigation					
1.3	Identify different browsers	1.3.1	Open existing web sites in different browsers					
1.4	Discuss HTML	1.4.1	View the source code of existing web sites Discuss the history of HTML					
1.5	Discuss XHTML	1.5.1	Discuss the differences between HTML and XHTML					

Unit 2: Create Web pages using HTML, XHTML, and CSS Hours: 30

<u>Terminology</u>: anchor element, body element, closing tag, comment tag, CSS, definition list, embedded style, external style, float, head element, heading elements (H1.....H6), hexadecimal color code, horizontal ruled line, hotspot, image map, inline style, opening tag, ordered list, table, tag, title element, unordered list

	CAREER a	nd TEC	HNICAL SKILLS	ACADEMIC and WORKPLACE SKILLS			
	What the Stu	ıdent Sh	nould be Able to Do	What the Instruction Should Reinforce			
	Knowledge		Application	Skill Group	Skill	Description	
2.1	Define terminology	2.1.1	Prepare a list of terms with definitions	Foundation	Listening	Comprehends ideas and concepts related to plans [1.2.1]	
					Writing	Uses words appropriately [1.6.21]	
2.2	Identify parts of a basic web page	2.2.1	Create web pages with the following:				
			Head, Title, and Body Elements				
			Paragraph element				
			Ordered, unordered or definition lists				
			Graphics, font styles, horizontal ruled lines				
2.3	Discuss ways to add navigation to a Web site	2.3.1	Create web pages with these navigations:				
			identify elements or anchors				
			links between pages				
			pictures as links				
			mail to link				
			link to another web site				
2.4	Describe ways to enhance a web page	2.4.1	Add color to the background of a web page				
		2.4.2	Add various font styles adding color, size, font-family, etc				
		2.4.3	Insert and format graphics				
2.5	Identify uses of image maps	2.5.1	Create hot spots and image maps				

	CAREER a	nd TEC	CHNICAL SKILLS		ACADEMIC and	WORKPLACE SKILLS
	What the Stu	udent Sh	nould be Able to Do	What the Instruction Should Reinforce		
	Knowledge		Application	Skill Group	Skill	Description
2.6	Describe the importance of using tables in web design	2.6.1	Create tables for text and graphics			
		2.6.2	Discuss how to layout a website using a table			
2.7	Discuss the importance of CSS	2.7.1	Compare/Contrast styles: Inline, Embedded, and External			
		2.7.2	Write the code necessary to create an inline style, embedded style, and an external style sheet			

Unit 3: Exploring Graphics in PhotoShop Hours: 20

Terminology: CMYK, crop, filter, flattening, GIF, JPEG, layer, marquee, opacity, pixels, PNG, RGB, transform, typography

	CAREER a	and TEC	HNICAL SKILLS	ACADEMIC and WORKPLACE SKILLS			
	What the St	udent Sh	nould be Able to Do	What the Instruction Should Reinforce			
	Knowledge		Application	Skill Group	Skill	Description	
3.1	Define terminology	3.1.1	Prepare a list of terms with definitions	Foundation	Listening	Comprehends ideas and concepts related to plans [1.2.1]	
3.2	Discuss the PhotoShop environment	3.2.1	Identify the parts of the environment		Writing	Uses words appropriately [1.6.21]	
3.3	Identify various methods used to obtain, edit and repair	3.3.1	Obtain pictures from the Internet and/or a digital camera Edit and repair graphics using some of these tools: layer styles, filters, eye dropper tool, blending, liquify, marquee tool, transparent backgrounds, clone stamp tool, free transform, opacity, red eye tool, and more				
3.4	Explain various color techniques	3.4.1	Explain the difference between RGB and CMYK Edit colors in a graphic				
3.5	Explain various typography	3.5.1 3.5.2	Insert and format text Explain why you need to rasterize text				

	CAREER a	and TEC	CHNICAL SKILLS	ACADEMIC and WORKPLACE SKILLS			
	What the St	udent Sh	nould be Able to Do	What the Instruction Should Reinforce			
	Knowledge		Application	Skill Group	Skill	Description	
3.6	Discuss various formats for saving graphics	3.5.2	Save graphics as a GIF, JPEG, PNG and more				
		3.5.3	Optimize graphics for the web				
3.7	Explain how to use layers	3.7.1	Create a graphic using multiple layers				
		3.7.2	Flatten the graphic before saving				
3.8	Discuss types of grahics that can be created for the web	3.7.1	Create a graphic for use on a website, such as a banner, logo, web template, etc.				

Unit 4: Creating Animations in Flash Hours: 30

Terminology: ActionScript, fill, Flash, Flash player, frame-by-frame animation, frames, layers, library, mask layer, motion tween, playhead, scenes, shape tween, stroke, symbol, timeline

	CAREER a	nd TEC	HNICAL SKILLS	ACADEMIC and WORKPLACE SKILLS			
	What the Stu	ident Sh	ould be Able to Do	What the Instruction Should Reinforce			
Knowledge			Application	Skill Group	Skill	Description	
4.1	Define terminology	4.1.1	Prepare a list of terms with definitions	Foundation	Listening	Comprehends ideas and concepts related to plans [1.2.1]	
					Writing	Uses words appropriately [1.6.21]	
4.2	Identify the environment	4.2.1	Identify many of the parts of the environment				
4.3	Describe how to insert and transform text and graphics	4.3.1	Add and format text using some of these: aligning, colors, size, skew, gradient and more				
		4.3.2	Use the drawing tools to create various objects				
		4.3.3	Resize, rotate, skew, distort and flip an object				
4.4	Describe the steps necessary to create a tween	4.4.1	Create a motion tween				
		4.4.2	Create a shape tween				
4.5	Discuss reasons for symbols	4.5.1	Create graphic, button or movie clip symbols				

	CAREER a	nd TEC	HNICAL SKILLS		ACADEMIC and	WORKPLACE SKILLS
	What the Stu	udent Sh	ould be Able to Do		What the Instruc	ction Should Reinforce
	Knowledge	Application		Skill Group	Skill	Description
4.6	Explain different kind of actions	4.6.1	Write introductory level ActionScript			
4.7	Explain how to create a frame- by-frame animation	4.7.1	Create a frame-by-frame animation			
4.8	Explain how to create a motion guide for an object	4.8.1	Create a motion guide for an object and orient the object to the path			
4.9	Discuss the steps necessary to create a mask effect	4.9.1	Create a mask effect			
4.10	Explain different ways to add sound to a video	4.10.1	Add sound to a video			
4.11	Discuss why you should use scenes when creating a long movie	4.11.1	Create a video with multiple scenes			
4.12	Describe how to publish and export a movie	4.12.1 4.12.2	Publish a video using several different options Export a video			

Unit 5: Understanding Sound

Hours: 5

Terminology: amplitude, analog, compression, digital, fade in/fade out, frequency, MIDI, MPEG, streaming media, WAV

	CAREER a	nd TEC	CHNICAL SKILLS		ACADEMIC and WORKPLACE SKILLS			
	What the Stu	udent SI	nould be Able to Do	What the Instruction Should Reinforce				
	Knowledge		Application	Skill Group	Skill	Description		
5.1	Define terminology	5.1.1	Prepare a list of terms with definitions	Foundation	Listening	Comprehends ideas and concepts related to plans [1.2.1]		
					Writing	Uses words appropriately [1.6.21]		
5.2	Discuss audio and audio formats	5.2.1	Locate and play various different sound files					
		5.2.2	Record sound using a sound recorder					
5.3	Explain how to edit music files	5.3.1	Open or import music files and edit them using an audio editor					
		5.3.2	Use various editing techniques such as fade in/fade out, cut or razor, and other audio effects					
5.4	Explain ways to save audio files	5.4.1	Save audio files in different formats					

Unit 6: Editing Video

Hours: 15

Terminology: AVI, codec, linear, MOV, nonlinear, frame, timeline, WMV

	CAREER a	nd TEC	HNICAL SKILLS	ACADEMIC and WORKPLACE SKILLS				
	What the Stu	udent Sh	nould be Able to Do		What the Instruction Should Reinforce			
	Knowledge	Application		Skill Group	Skill	Description		
6.1	Define terminology	6.1.1	Prepare a list of terms with definitions	Foundation	Listening	Comprehends ideas and concepts related to plans [1.2.1]		
					Writing	Uses words appropriately [1.6.21]		
6.2	Discuss video and video formats	6.2.1	Obtain videos from the Internet, other sources, and/or a digital camcorder					
		6.2.2	Explain each of these formats: AVI, MPEG, MOV, RAM, OR WMV					
6.3	Explain the difference between linear and nonlinear	6.3.1	Compare/Contrast linear and nonlinear					
6.4	Explain how to edit video files	6.4.1	Open or import video files and edit them using a video editor					
		6.4.2	Use various editing techniques: video effects, transitions, razor, slow motion, and others					
6.5	Explain ways to save video files	6.5.1	Save video in different formats					

Unit 7: Planning and Designing a Successful Web Site Hours: 20

<u>Terminology</u>: client, copyright, end-user scenarios, Fair Use Law, flowcharts, public domain, royalty free, Section 508, site concept, site map, site metaphor, storyboard, target audience, trademark, user profile, web-safe colors, white space, wireframe

	CAREER a	nd TEC	HNICAL SKILLS	ACADEMIC and WORKPLACE SKILLS			
	What the Stu	ıdent Sh	ould be Able to Do	What the Instruction Should Reinforce			
	Knowledge		Application	Skill Group	Skill	Description	
7.1	Define terminology	7.1.1	Prepare a list of terms with definitions	Foundation	Listening	Comprehends ideas and concepts related to plans [1.2.1]	
					Writing	Uses words appropriately [1.6.21]	
7.2	Identify website requirements needs	7.2.1	Identify the purpose, audience, and audience needs for the website				
		7.2.2	Discuss web page content that is relevant to the website purpose and appropriate for target audience				
		7.2.3	List reasons for copyright laws				
		7.2.4	Demonstrate knowledge of website accessibilty standards				
		7.2.5	Make website development decisions based on analysis and interpretation of design specifications				
		7.2.6	Understand project management tasks and responsibilities				
7.3	Demonstrate best practices for designing a website	7.3.1	Discuss the best practices for designing a website including the following:				
			maintaining consistency separating content from design, visual hierarchy, font decisions, web-safe colors, and more				
7.4	Discuss the importance of testing websites	7.4.1	Produce website designs that work equally well on various operating systems				
		7.4.2	Produce website designs that work equally well on various browsers				
		7.4.3	Produce website designs that work equally well with various resolutions and window sizes				
7.5	Identify good page layout design concepts and principles	7.5.1	Discuss good page layout design concepts and design				
		7.5.2	Develop a site concept and site metaphor				

	CAREER a	nd TEC	CHNICAL SKILLS		ACADEMIC and	WORKPLACE SKILLS
	What the Stu	ident Sh	nould be Able to Do	What the Instruction Should Reinforce		
	Knowledge		Application	Skill Group	Skill	Description
7.6	Discuss usabilty, readability, and accessibility needs in the website plan	7.6.1	Incorporate basic usability, readability, and accessibility principles into a website design			
7.7	Demonstrate tools to help organize a website	7.7.1	Demonstrate knowledge of flowcharts, storyboards, and wireframes			
		7.7.2	Demonstrate knowledge of a site map or index			
7.8	Demonstrate communciation of design and content plans with other	7.8.1	Present your design and content plans to others			

Unit 8: Adding Content to a Website using Dreamweaver Hours: 25

<u>Terminology</u>: alternative text, cell padding, cell spacing, Code View, Design View, download time, Fireworks, JavaScript, local root folder, merge cells, navigation bar, rollover images, site definition, split cells

CAREER and TECHNICAL SKILLS			ACADEMIC and WORKPLACE SKILLS				
What the Student Should be Able to Do				What the Instruction Should Reinforce			
	Knowledge	Application		Skill Group	Skill	Description	
8.1	Define terminology	8.1.1	Prepare a list of terms with definitions	Foundation	Listening	Comprehends ideas and concepts related to plans [1.2.1]	
					Writing	Uses words appropriately [1.6.21]	
8.2	Identify the parts of the environment	8.2.1	Identify various windows, views, panels and toolbars				
8.3	Describe how to create a site	8.3.1	Create a local root folder				
		8.3.2	Create a site definition				
		8.3.2	Create and save an index page				
8.4	Identify ways to add and format text	8.4.1	Add text to a web page				
		8.4.2	Add various formatting options to text				
		8.4.3	Format and create text using lists unordered, ordered, or definition				
8.5	Identify ways to insert and format images	8.5.1	Insert and format graphics with alternative text				
		8.5.2	Add borders to graphics				
		8.5.3	Set the vertical or horizontal spacing to images				

	CAREER	nd TEC	HNICVI SKILLS		ACADEMIC and	MODKBI VCE SKILLS	
CAREER and TECHNICAL SKILLS				ACADEMIC and WORKPLACE SKILLS			
	What the Student Should be Able to Do			What the Instruction Should Reinforce			
	Knowledge		Application	Skill Group	Skill	Description	
8.6	Identify ways to link web content	8.6.1	Create links using text and images				
		8.6.2	Create email links				
		8.6.3	Create anchors				
		8.6.4	Compare/Contract absolute and relative paths				
8.7	Explain how to insert rich media	8.7.1	Insert video, sound and animation into a website				
8.8	Discuss ways to add navigation to a website	8.8.1	Create at least one of these navigation structures: navigaton bars, rollover images, objects, buttons created in Fireworks OR Spry menu bars				
8.9	Discuss uses of image maps	8.9.1	Create hotspots and image maps on a webpage				
8.10	Discuss uses of tables in websites	8.10.1	Import a table into a web page				
		8.10.2 8.10.3	Create and format tables on a web page using some of these features: merge, split, header, cell padding, cell spacing, and borders Use tables for web page layout				
8.11	Explain how to import a document	8.11.1	Import a document				
		8.11.2	Import a document				
	Explain how to add a form to a web page	8.12.1	Create and format a form using some of these form features: text fields, checkbox, radio button, list menu, etc.				
8.13	Discuss dynamic web pages	8.13.1	Explore how to make a web site dynames Te	chnologies 13			

Unit 9: Organizing Content using Dreamweaver Hours: 20

<u>Terminology</u>: absolute positioning, div tag, elastic layout, fixed-width layout, floating positioning, liquid layout, meta tags, templates

CAREER and TECHNICAL SKILLS				ACADEMIC and WORKPLACE SKILLS		
What the Student Should be Able to Do				What the Instruction Should Reinforce		
	Knowledge	Application		Skill Group Skill		Description
9.1	Define terminology	9.1.1	Prepare a list of terms with definitions	Foundation	Listening	Comprehends ideas and concepts related to plans [1.2.1]
					Writing	Uses words appropriately [1.6.21]
9.2	Discuss web page layout	9.2.1	Differentiate between fixed-width, liquid, and elastic layouts			
		9.2.2	Create web pages using various layout absolutely-positioned div tags CSS tables wrapper/container div tags			
9.3	Discuss web page templates	9.3.1	Create a web site using one of the templates			
		9.3.2	Create and modify a web page template			
9.4	Discuss the importance of making a web page visible to search engines	9.4.1	Create appropriate meta tags for a website			

Unit 10: Evaluating and Maintaining a Site by Using Dreamweaver Hours: 10

Terminology: checked in/out, downloading, publish, synchronize, uploading

CAREER a	ACADEMIC and WORKPLACE SKILLS			
What the Stu	udent Should be Able to Do	What the Instruction Should Reinforce		
Knowledge	Application	Skill Group	Skill	Description
10.1 Define terminology	10.1.1 Prepare a list of terms with definitions	Foundation	Listening	Comprehends ideas and concepts related to plans in advertising [1.2.1]
			Writing	Uses words appropriately [1.6.21]
10.2 Identify basic technical tests	10.2.1 Use various technical tests on a website			
10.3 Identify techniques for basic usability tests	10.3.1 Use some of these tests: Accessibility report, check for missing alternate text			
10.4 Identify methods for collecting site feedback	10.4.1 Collect site feedback from various sources			
10.5 Manage assets, links, and files for a site	10.5.1 Use some of these tests on a website: check for broken links, orphaned files, check links sitewide, untitled documents, web-safe colors, site map, validating markup and more			

	CAREER and TECHNICAL SKILLS What the Student Should be Able to Do			ACADEMIC and WORKPLACE SKILLS What the Instruction Should Reinforce			
	Knowledge Application		Skill Group	Skill	Description		
10.6	Discuss steps necessary to publish a web site	10.6.1 Idenfity steps necessary to publish a website					
		10.6.2 Explain the difference between uploading and downloading					
		10.6.3 Explain what it means to synchronize files					
10.7	Explain ways to manage a website with a team	10.7.1 Explain checking in/out files					

Glossary

Unit 1: Intro to Web Pages and the WWW

- 1. deprecated--an HTML feature that is being phased out and which might not be supported in future browsers
- 2. domain name--an IP address expressed in letters instead of numbers, usually reflecting the name of the business represented by the Web site
- 3. FTP--File Transfer Protocol. Used to control how files are transferred from server to server
- 4. HTML--Hypertext Markup Language. The language you use to create a web page
- 5. HTTP--Hypertext Transfer Protocol. The communication protocol used to transfer Web pages from a Web server to a Web browser
- 6. hyperlink--a link that you can activate, usually with a mouse click, to open a document or other resource
- 7. hypertext--text that contains links to other documents or resources
- 8. Internet--the largest Wide Area Network in existence, which spans the globe and provides users access to the WWW and other important resources
- 9. IP address--an assigned series of numbers, separated by periods, that designates an address on the Internet
- 10. ISP--Internet Service Provider
- 11. network--a structure linking computers and other devices together for the purpose of sharing resources such as printers and files
- 12. protocol--a set of rules defining how information is exchanged between two devices
- 13. server--a computer or other device that makes a resource available on a network
- 14. URL--Universal Resource Locator. The address that specifies the precise location of a resource on the Internet
- 15. Web browser--a program that retrieves a Web page from a Web server and renders it or changes it into a graphical format
- 16. Web client--a device on a network, such as a computer, that requests the resources from the server
- 17. Web page--a document on the Web
- 18. Web server--a computer that stores Web pages and makes them available on a network
- 19. Web site--a collection of web pages that work together
- 20. WWW--World Wide Web. The collection of hypertext documents that made the resources of the Internet accessible to the general public
- 21. XHTML--Extensible Hypertext Markup Language. A stricter version of HTML designed to confront some of the problems associated with the different and competing versions of HTML

Unit 2: Create Web pages using HTML, XHTML, and CSS

- 1. anchor element-an element that marks a specific location within a document using the a> tag
- 2. body element-the element containing all of the content to be displayed on a Web page
- comment tag--a tag that allows the user to insert a comment in your HTML code
- 4. CSS--(Cascading Style Sheet) the most common style sheet language on the Web
- 5. definition list--an HTML list format; each item consists of a term followed by its definition
- 6. embedded style--a style sheet placed in a document's head, setting the style defintions for the document's elements
- 7. external style--a style sheet places saved in a separate document and applied to a group of pages in a Web site
- 8. float--a style used to wrap paragraph text around an image (none, left, right)
- 9. head element--the element containing information about a document, such as its title or meta tags. Tthe Web page does not display these contents
- 10. heading elements (H1.....H6) a style used for text with H1 being the biggest and H2 the smallest
- 11. hexidecimal color code--a value that represents the amount of red, green, and blue in a color and is based on the Base 16 number system; this includes 0-9, A-F
- 12. horizontal ruled line--a line that can be inserted into a document
- 13. hotspot--an area within an image that accesses a link or performs an action when clicked or activated by the user
- 14. image map--an image containing hotspots at specific locations
- 15. inline style--a style applied to a specific element through the use of the style attribute in the element's tag
- 16. ordered list--an HTML list format in which items appear in order preceded by numbers or letters
- 17. tag--the core building block of HTML, which marks each element in a Web page such as , </br>, <a>, etc.
- 18. title element--the element within the heading that contains the name of the Web page which will appear on the web page's title bar
- 19. unordered list--an HTML list format in which each item appears next to a bullet character

Unit 3: Exploring Graphics in PhotoShop

- 1. CMYK--(Cyan, Magenta, Yellow, Black) the colors produced using a color printer
- 2. crop--to exclude part of an image
- 3. filter--used to alter the look of an image and give it a special, customized appearance by applying special effects, such as distortion, changes in lighting, and blurring
- 4. flattening--merges all visible layers into one layer, named the Background layer, and deletes all hidden layers, greatly reducing the size
- 5. GIF (Graphics Interchange Format) a type of file format used for images placed on Web pages that can support both transparency and animation
- 6. JPEG--(Joint Photographic Experts Group) a type of file format used for image that appear on Web pages; used mostly for photographs
- 7. layer--(Photoshop) a selection within an image on which objects can be stored; each individual effect can then be isolated and manipulated on its own
- 8. marquee--a series of dotted lines indicating a selected area that can be edited or dragged into another image
- 9. opacity--determines the percentage of transparency with 100% being none; allows you to see through images
- 10. pixels--small squares of color used to display a digital image on a rectangular grid, such as a computer screen; each dot represents a color or shade
- 11. PNG--(Portable Network Graphics) a file format used for images placed on Web pages that is capable of showing millions of colors but is small in file size
- 12. RGB--(Red, Green, Blue) the colors produced using a monitor
- 13. transform--used to change graphics--size, flip horizontally and vertically, rotate, distort, scale, etc
- 14. typography--dealing with any style or format that has to do with text

Unit 4: Creating Animations in Flash

- 1. ActionScript--the Flash scripting language used by developers to add interactivity to movies, control objects, exchange data, and create complex animations
- 2. fill--a solid color, a pattern, or a gradient that makes up an object (for example if the object is a red circle, the inside of the circle is the fill)
- 3. Flash--an Adobe program that lets you create animations
- 4. Flash player--a program that allows Flash movies (.swf and .exe formats) to be viewed on the computer
- 5. frame-by-frame animation--animation that creates a new image for each frame. Usually simulates quick motions
- 6. frames--individual cells that make up the Timeline
- 7. layers--(Flash) rows on the Timeline that are used to organize objects and that allow the stacking of objects on the stage
- 8. Library--a panel containing graphic symbols, button symbols, and animation symbols
- 9. mask layer--a layer in a Flash document that is used to cover the objects on another layer and, at the same time, create a window through which you can view various objects on the other layer
- 10. motion tween--the process used in flash to automatically fill in the frames between keyframes in an animation that changes the properties of an object such as the position, size or color
- 11. playhead--an indicator specifying which frame is playing on the Timeline of a Flash movie
- 12. scenes--a way to organize long movies by dividing the movie into sections
- 13. shape tween--the process of animating an object so that its shape changes
- 14. stroke--the border of an object (for example if you had a red circle with a black border, the black is the stroke)
- 15. symbol--a graphic, animation, or button that repesents an object, text, or combination group
- 16. timeline--the component of Flash used to organize and control the movies' contents over time, by specifying when each object appears on the stage

Unit 5: Understanding Sound

- 1. amplitude--is the height of the wave, and it relates to the sound's volume; the higher the height of the wave, the higher the volume
- 2. analog--a type of audio that can be easily distorted because every sound is measured in recurring patterns
- 3. compression--used to reduce the size of a digital file
- 4. digital--the measurement of the sound's amplitude; the reproduction and transmission of sound stored in a format that can only be used on a computer
- 5. fade in/fade out--the process of changing a song's volume to grow fainter and then grow stronger; usually done as a transition between songs
- 6. frequency--the speed at which the sound wave moves, and it relates to the sound pitch
- 7. MIDI--(Musical Instrument Digital Interface) represents sound by recording each note's pitch, length, and volume; tend to have a synthesized sound
- 8. MPEG--(Moving Pictures Expert Group) a compressed video or audio file format that is the current standard for exchanging music files over the Internet; the most recent is MP4
- 9. streaming media--includes sound and video, processed in a steady and continuous stream as they are downloaded by the browser; a term used to describe the listening or viewing of media via the Internet in real time
- 10. WAV--developed for the Windows operating system and are one of the most common sound formats on the Web

Unit 6: Editing Video

- 1. AVI--(Audio/Video Interleaved) the most common video file format developed by Microsoft
- 2. codec--(short for compression/decompression) used to control file size, each frame is compressed and when a video is played, each frame is decompressed
- 3. frame--each single image; as in a movie theater, a video file is composed of a series of single images
- 4. linear--video editing which requires fast forwarding and rewinding to specific spots in the video; sequential editing
- 5. MOV--a video format developed by Apple computers for Windows and Apple computers
- 6. non-linear--a process that allows quick access to a specific point in a video file; random editing
- 7. timeline--editing panel where clips are arranged and sequenced
- 8. WMV--(Windows Media) developed by Microsoft, Window Media is a popular streaming video format

Unit 7: Planning and Designing a Successful Web Site

- 1. client--the person or persons for who for whom you are working
- 2. copyright--A protection that covers published and unpublished literary, scientific and artistic works, whatever the form of expression, provided such works are fixed in a tangible or material form; it attaches to a work as soon as it is created and you do not have to register it with the U.S. Copyright Office
- 3. end-user scenarios--an imagined situation in which the target audience might access a Web site; used to envision actual conditions that an end user will experience while visiting a Web site
- 4. Fair Use Laws--allows limited use of copyright-protected work; usually applies to use in an educational setting
- 5. flowchart--a diagram of geometric shapes connected by lines that shows steps in sequence
- 6. public domain--work that is not protected by copyright; anyone can use it however they wish for any purpose
- 7. royalty free--created content which may be offered to the public or individuals (normally for a specified amount of money) to be used in specified ways (terms of usage). The creator retains all copyrights and publishing rights
- 8. Section 508--requires Federal agencies to make their electronic and information technology accessible to people with disabilities
- 9 site concept--general underlying theme that unifies the various elements of a site and contributes to the site's look and feel
- 10. site map--a graphical representation of how Web pages relate to each other within a Web site
- 11. site metaphor--a visual expression of the site concept, which reinforces the site messsage and the site goals, helping to create a unified design
- 12. storyboard--a sketch that represents each page in a Web site showing the relationship of each page to the other pages in the site
- 13. trademark--protects an image, word, slogan, or design used to identify goods or services
- 14. target audience--the group of people who you would most like to use your product or service
- 15. user profile--the information about the target audience you are trying to reach that you might gather from a list of questions
- 16. web safe colors--the 216 colors that provide Web designers a reliable color palette
- 17. white space--the empty space in a page
- 18. wireframe--a barebones page mockup that is created in a graphics program instead of being drawn by hand

Unit 8: Adding Content to a Website using Dreamweaver

- 1. alternative text--a description of non-text content such as a picture that is placed in the alt tag that can be read by an assistive device
- 2. cell padding--the distance between the cell content and the cell walls in a table
- 3. cell spacing--the distance between cells in a table
- 4. Code View--a Web page view that shows a full screen with HTML code for the page
- 5. Design View--a view that shows a full-screen graphical and textual layout and is primarily used when designing and creating a page
- 6. download time--the time it takes to transfer a file to another computer. Usually when creating web sites you want to keep the file sizes small which will decrease download time
- 7. Fireworks--created by Adobe as a bitmap and vector graphics editor; great for creating logos and buttons
- 8. JavaScript--a scripting language that works with HTML and is used to add advanced capabilities to Web pages
- 9. local root folder--the location where you store all the files used by the local version of the Web site
- 10. merge cells--to combine multiple cells in a table into one cell
- 11. navigation bar--a set of text or graphic links that viewers can use to navigate between pages of a Web site
- 12. rollover images--an image that changes when the pointer moves across it
- 13. site definition--the information that tells Dreamweaver where to find the local and remote files for the Web site, along with other parameters that affect how the site is setup
- 14. split cells--to divide cells into multiple cells

Unit 9: Organizing Content using Dreamweaver

- 1. absolute positioning--positioning that enables you to specify the exact location (usually pixel) in the browser window in which the upper-left corner of the object will be placed
- 2. div tag--a transparent, block-level container placed in a Web page to hold content
- 3. elastic layout--a page layout with a fixed-width that user ems instead of pixels as the unit for div and tex styles, which enables the text and the page layout to change size when the user's browser display font size changes
- 4. fixed-width layout--a page layout that lets you set a specific size for the pages; pages display at the specified size regardless of the screen resolution
- 5. floating positioning--enables you to create flexible designs that vary in size and position in response to the user's monitor size and screen resolution
- 6. liquid layout--a page layout that adjusts to fit the user's browser width
- 7. meta tags--a tag in the head content that holds information about the page, gives information to the Web server including keywords and descriptions, or adds functionality to the page
- 8. templates--a special page that separates the look and layout of a page from its content by creating edible and noneditable regions
- 9. wrapper/container div tag--regular div tag that you place around the other dives and elements of the page

Unit 10: Evaluating and Maintaining a Site by Using Dreamweaver

- 1. check in/out--a Dreamweaver feature that enables a team to coordinate their work as they collaborate on pages of a site
- 2. downloading--transfer files from the remote site/server to the local site
- 3. publish--to make a Web site available for viewing on the Internet or an intranet
- 4. synchronize--a feature that helps as you upload changes to a Web site; instructs Dreamweaver to compare dates of saved files in both versions of the site, then transfers only the files that have changed
- 5. uploading--transfer files from the local site to the remote server or network server